REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The Examiner's objection to claim 6 under 37 C.F.R. §1.75(c) is respectfully traversed and reconsideration of same is requested. Claim 4 is explicitly directed to a single node "for use in a communications network of interconnected nodes". That is, the claimed subject matter of claim 4 reads on a single node in such a network. Dependent claim 6 clearly adds further limitation to that subject matter by claiming a communications network comprising a plurality of such interconnected nodes. Claim 6 has been amended slightly above so as to make this intention even more clearly apparent. As such, it clearly meets full compliance with 37 C.F.R. §1.75(c).

The rejection of claims 1-6 under 35 U.S.C. §103 as allegedly being made "obvious" based on Rahnema '729 in view of the applicant's "admitted" prior art Newbridge WO '005 is respectfully traversed.

The present claims specifically recite that the message (Setup Request) has an additional information element for containing the identity of a "Virtual Source Node"for the route setup. Rahnema discloses a header 72 which "carries data identifying a type characterization to be associated with packet 70, a length to be associated with packet 70, and any other information conventionally included in data packet headers" and a routing code 74 which includes a destination satellite number. In Rahnema's virtual path embodiment, the packet includes a tag

(presumably within the routing code 74, as it is not "conventional information"), which identifies a source-destination pair.

This tag in the packet is inviolate. It is not changed when routing becomes blocked and crankback occurs.

To help understand the distinction between claim 1 and the hypothetical Rahnema/Newbridge combination, consider a Rahnema-type routing applied to the example routing in the applicant's specification.

When Node S handles a new message, it will retrieve the tag X (corresponding to the pair S/D), and refer to its routing table for the entry for X. A Rahnema-type routing table will contain a primary route, a secondary route and a tertiary route (but for the purpose of comparison, references to the tertiary route will be omitted). Node S will route the message to primary route node A.

When Node A receives the message, it will retrieve the tag X, and refer to its routing table for the entry for X. It will route the message to primary route node B.

When Node B receives the message, it will retrieve the tag X, and refer to its routing table for the entry for X. It will try to route the message to primary route node H, but this fails. Node B will now retrieve the secondary route from that entry for X, i.e., the source-destination pair, S/D, and will try to route the message to secondary route node C.

This route also fails, so, in accordance with Newbridge, node B will send a Release message to node A and include a crankback Information Element in the Release message to

indicate Crankback (as opposed to normal call clearing). Node A will now try sending the message to the secondary route node G in accordance with its routing table entry for X. <u>The header information of the message itself is not changed at any time</u>, so node G accesses its routing table to find the entry for X.

A similar routing situation in accordance with the present invention will now be briefly described with comments as to the differences with the foregoing Rahnema-type routing.

When Node S handles a new message, it will retrieve the value from the virtual source field (i.e., information element) and the value from the destination field to make a virtual source/destination pair, which in this case is S/D, and noting that it is to act in source mode, it will refer to its routing table for the entry for S/D, and will route the message to primary route node A.

The Rahnema tag is constant throughout the routing process, whereas the content of the virtual source field is dynamic according to the routing history.

When Node A receives the message, it will retrieve the virtual source/destination pair, S/D, and note that it is to act in transit mode. It will ignore its nine source mode entries (AS, AB, AC, AD, AE, AF, AG, AH, AJ) and look in its transit mode entries for the source/destination pair, S/D. Transit mode entries have only a single pre-allocated route, in this case the route is to node B.

When Node B receives the message, it will retrieve the virtual source/destination pair, S/D, and note that it is to act in transit mode. It will look in its transit mode entries for the source/destination pair, S/D. The single pre-allocated route is to node H.

Node B will try to route the message to node H, but this fails. Node B will now change the content of the virtual source field to "B", and re-process the message. This time node B recognizes that it is to act in source mode for the virtual source/destination pair, B/D, and accesses its routing table by the pair, B/D. It is important to note that at no time does Rahnema change the value of the tag when accessing the routing table, whereas in the present invention, node B is now accessing its routing table in respect of a pair B/D, which is different from the original pair S/D.

Node B retrieves the unused route from the source routes, in this case, the route to node C. If this route were available, it is important to note that the message received by node C would contain the virtual node B, so node C would act in transit mode and look for the transit mode entry for B/D. In a Rahnema-type arrangement, node C would still access its routing node in respect of the pair S/D.

Consider now that the route to node C also fails, so, in accordance with the present invention, node B makes a change to the virtual source field of the message to make the virtual source "A", and sends the modified message to node A.

Node A will retrieve the virtual source/destination pair, A/D, will recognize that it is to act in source mode for the virtual source destination pair, A/D, and access its routing table by the pair, A/D. It will then send the modified message, now indicating that the virtual source node is

A, to node G. Similarly, node G will access its routing table in respect of the pair A/D, in contrast to a Rahnema-type arrangement which would access in respect of the pair S/D.

Specifically, Rahnema does not disclose a virtual source information element (field) as recited in claim 1, contrary to the Examiner's assertion that this is disclosed at column 15, lines 50-64. As there is no virtual source node identity, Rahnema cannot disclose a step of comparing the node identity with a virtual source node identity retrieved from the message, and cannot disclose a step of accessing a routing table in accordance with such a retrieved virtual source node/destination node pair. Rahnema does not disclose that a failure in a transit mode attempt results in the node overwriting the content of the virtual source field with its own node identity of the node from which it received the message.

There is no suggestion in Rahnema or Newbridge that the skilled person should consider adding a new field to contain a node identity which will be treated as a source node and which will be <u>changed dynamically</u> as route failures are encountered.

To repeat, the hypothetical combination of Rahnema and Newbridge does <u>not</u> disclose or suggest all the features of even the independent claims of the present invention.

Dependent claims 2, 3, 5 and 6 add yet further patentable distinction. In view of the above discussion of the substantial deficiencies of the cited prior art, it is not believed necessary at this time to further discuss the deficiencies of this art with respect to such dependent claims.

Accordingly, this entire application is now believed to be in allowable condition and a formal Notice to that effect is respectfully solicited.

Respectfully submitted,

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